# IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

BLACKBIRD TECH LLC d/b/a BLACKBIRD TECHNOLOGIES,	
Plaintiff, v.  ARRO, INC., AND CREATIVE MOBILE TECHNOLOGIES, LLC,  Defendants.	C.A. No JURY TRIAL DEMANDED

#### **COMPLAINT FOR PATENT INFRINGEMENT**

Plaintiff Blackbird Tech LLC d/b/a Blackbird Technologies ("Blackbird Technologies" or "Plaintiff") hereby alleges for its Complaint for Patent Infringement against Defendants Arro, Inc. ("Arro"), and Creative Mobile Technologies, LLC ("CMT") (collectively, "Defendants"), on personal knowledge as to its own activities and on information and belief as to all other matters, as follows:

#### THE PARTIES

- 1. Plaintiff Blackbird Technologies is a limited liability company organized under the laws of Delaware, with its principal place of business located at One Boston Place, Suite 2600, Boston, MA 02108.
- 2. On information and belief, Defendant Arro is a corporation organized and existing under the laws of Delaware with its principal place of business located in New York.
- 3. On information and belief, Defendant CMT is a limited liability company organized and existing under the laws of New York with its principal place of business located at 42-32 21<sup>st</sup> Street, Long Island City, NY 11101.

- 4. Joinder is proper under 35 U.S.C. § 299 because the allegations of infringement contained herein are asserted against the Defendants jointly, severally, or in the alternative with respect to or arising out of the same transaction, occurrence, or series of transactions or occurrences, including without limitation Defendants' making and using of the "Accused System" (defined *infra*). There are questions of fact common to both Arro and CMT, including without limitation questions relating to their respective roles in hosting, developing, programming, operating, supporting, advertising, promoting, and/or providing network services to enable on demand taxi transportation to be reserved through the "Client App" and "Driver App" (both defined *infra*).
- 5. Upon information and belief, CMT is or acts as the parent company of Arro. *See*, *e.g.*, <a href="https://www.facebook.com/GoArro/posts/1093984553957290">https://www.facebook.com/GoArro/posts/1093984553957290</a> (Arro sharing a photo "[a]s seen on our parent company's Facebook Page (CMT Group)....").

#### JURISDICTION AND VENUE

- 6. This is an action for patent infringement arising under the provisions of the Patent Laws of the United States of America, Title 35, United States Code §§ 100, *et seq*.
- 7. Subject-matter jurisdiction over Blackbird Technologies' claims is conferred upon this Court by 28 U.S.C. § 1331 (federal question jurisdiction) and 28 U.S.C. § 1338(a) (patent jurisdiction).
- 8. This Court has personal jurisdiction over Arro because Arro has been incorporated in Delaware at all relevant times and has purposely availed itself of the privileges and benefits of the laws of Delaware.
- 9. This Court has personal jurisdiction over CMT because CMT has established minimum contacts with this forum by regularly conducting business in Delaware. For example,

CMT consolidated with Mobile Knowledge Systems Inc. in 2014 to become "the largest integrated taxi technology company worldwide," and has sold and offered to sell products including without limitation its "FREEdom Solution," which integrates taxi dispatching, banking, and media components, throughout Delaware. *See, e.g.*,

http://creativemobiletech.com/company-overview/ & http://creativemobiletech.com/about-cmt-2/where-we-are/.

10. Venue is proper in this judicial district pursuant to 28 U.S.C. §§ 1391(b) and (c) and § 1400(b) at least because Defendants are subject to personal jurisdiction in this district and reside in this district, and CMT transacts business within this district.

### U.S. PATENT NO. 7,797,448

- 11. U.S. Patent No. 7,797,448 (the "'448 patent") entitled, "GPS-Internet Linkage," was duly and legally issued by the U.S. Patent and Trademark Office on Sept. 14, 2010.

  Blackbird Technologies is the owner by assignment of all right, title, and interest in and to the '448 patent, including all right to recover for any and all infringement thereof. The '448 patent is valid and enforceable. A true and correct copy of the '448 patent is attached as Exhibit A.
- 12. Claim 1 of the '448 patent recites, for example, an integrated system whereby computers equipped with Global Positioning System ("GPS") units are configured to identify their respective locations and communicate with each other over the Internet. This integration is directed to a specific improvement in the way computers can transmit messages over the Internet by enabling transmitted data to have an associated location characteristic that can be used to help identify the transmitting computer, implement security protocols in a private network, or track the movement of transmitting mobile devices, for example. This claim, therefore, is necessarily rooted in computer technology in order to address a challenge specifically arising in the realm of

computer networks and particular to the Internet, and requires a GPS unit such that other systems and methods of identifying a transmitting computer's location are not pre-empted, including without limitation by using only Wi-Fi access points and cellular tower locations.

- 13. The integration of Internet communications with GPS specifically, as opposed to other means for determining the location of mobile devices, was a novel approach at the time of the invention that coincided with then Vice President Al Gore's announcement of a GPS modernization initiative to make GPS more accessible to the public by adding new civil signals for future GPS satellites. *See* Press Release, The White House, Vice President Gore Announces New Global Positioning System Modernization Initiative (Jan. 25, 1999), *available at* <a href="http://clinton6.nara.gov/1999/01/1999-01-25-vice-president-gore-announces-new-global-positioning-system.html">http://clinton6.nara.gov/1999/01/1999-01-25-vice-president-gore-announces-new-global-positioning-system.html</a>.
- 14. Claim 4 of the '448 patent depends upon claim 1 to further recite, for example, that the integrated system creates localized computer networks based on geographic proximity of the computers equipped with GPS units.
- 15. Claim 6 of the '448 patent depends upon claim 1 to further recite, for example, that the integrated system provides automatic identification of the computers equipped with GPS units.
- 16. Claim 8 of the '448 patent recites, for example, a method for identifying the locations of computers equipped with GPS units by using the integrated system of claim 1.

#### COUNT I – INFRINGEMENT OF U.S. PATENT NO. 7,797,448

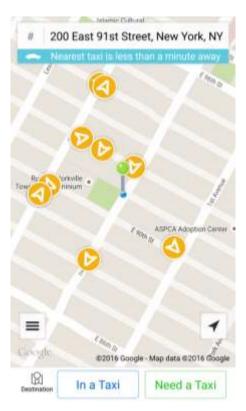
- 17. Blackbird Technologies reasserts and incorporates by reference Paragraphs 1 through 16 of this Complaint as if fully set forth herein.
- 18. Defendants have become aware of the '448 patent at least by virtue of the filing of this Complaint.
- 19. On information and belief, Defendants host, develop, program, operate, support, and/or provide network services to enable on demand taxi transportation ("Arro Services"). *See*, *e.g.*, Arro Terms & Conditions at 1 ("The Services include, but are not limited to, any applications, websites, content, products, software or other Services that enable or facilitate the ability for a Person seeking to reach one or more destinations (the 'Passenger(s)') to order, identify, obtain and/or pay for a ride from a provider of such service (the 'Driver(s)'). When used in the Terms, 'Application(s)' means any and all websites, web services, mobile applications and mobile services, however accessed and/or used, whether via personal computers, mobile devices or otherwise)."), *available at* <a href="http://goarro.com/terms">http://goarro.com/terms</a>.
- 20. On information and belief, Defendants develop, program, support, and make available a mobile app for Arro customers ("Client App"), and software for in-vehicle dispatch equipment for professional taxi and for-hire drivers, including but not limited to those provided by CMT, for Arro drivers ("Driver App"). *See, e.g.*, Jonah Bromwich, *Arro, a Ride-Hailing App, Connects Directly With Yellow Taxis*, N.Y. Times (Sept. 11, 2015) ("CMT recently partnered with Arro, a ride-hailing app that is synched with CMT terminals. That means that drivers who have CMT technology installed in their cabs can now be hailed by the app's users."), *available at* <a href="http://www.nytimes.com/2015/09/13/nyregion/arro-a-ride-hailing-app-connects-directly-with-yellow-taxis.html">http://www.nytimes.com/2015/09/13/nyregion/arro-a-ride-hailing-app-connects-directly-with-yellow-taxis.html</a>; Lisa Brown, *Yellow Cabs Now Have Their Own Ride-Hailing App*, Observer

- (Sept. 5, 2015) ("While Uber is used by drivers on their smartphones, Arro is installed through CMT's systems and works automatically, so passengers still pay with the meter.").
- 21. On information and belief, the Client App is being made available to all CMT customers that have deployed the TaxiHail Inc. branded booking app. *See, e.g.*, <a href="http://www.mobile-knowledge.com/mobile-knowledge-extends-partner-network-with-the-addition-of-national-booking-app-technology/">http://www.mobile-knowledge.com/mobile-knowledge-extends-partner-network-with-the-addition-of-national-booking-app-technology/</a> ("Arro, Inc., whose technology was incubated out of Mobile Knowledge parent company, Creative Mobile Technologies (CMT), has created a national app for smartphone users that quickly connects riders with existing licensed taxicabs and drivers that are utilizing CMT's in-vehicle, GPS-based credit card processing equipment....

  Growth plans call for Arro to be available to all Mobile Knowledge taxi dispatch customers that have deployed the TaxiHail Inc. (www.taxihail.com) branded booking app which is currently in use at more than 150 taxi companies."). To the extent the Client App has already been integrated with or made available to such TaxiHail Inc. branded booking app customers, the Arro Services, Client App, and Driver App encompass these TaxiHail Inc. branded apps and services, and if their service locations include Delaware, provide additional grounds for conferring specific personal jurisdiction over Defendants upon this Court.
- 22. On information and belief, the Client App can be installed on computing devices ("Client Device") running several different operating systems, including but not limited to certain versions of iOS and Android.
- 23. On information and belief, the Driver App is accessible from in-vehicle dispatch equipment for professional taxi and for-hire drivers, including but not limited to those provided by CMT, and may be used in conjunction with an optional "driver companion app" installed on an iPhone or Android device to display turn-by-turn directions on a map to help Arro drivers

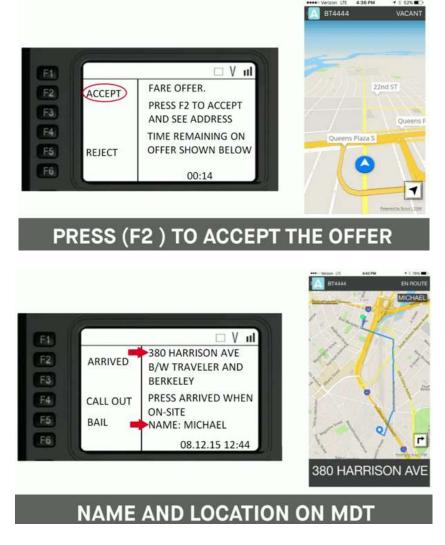
navigate. (collectively, or without optional driver companion app, the "Driver Device"). *See* generally, e.g., Arro Driver Companion App Guide, available at <a href="http://www.goarro.com/fleets/new-york/companion-app-guide.pdf">http://www.goarro.com/fleets/new-york/companion-app-guide.pdf</a>; Arro Driver app store page.

24. On information and belief, a Client App user can request a ride from a Driver App user. The default pickup location for the ride is at or near the current location of the Client Device. For example:



(Samsung Galaxy S6 screenshot of Client App.) *See also, e.g.*, <a href="http://www.goarro.com/privacy">http://www.goarro.com/privacy</a>
("We track geolocation data through your Mobile Device for various purposes. These purposes include for you to be able to view the drivers in your area that are close to your location, for you to set your pick up location (which is the location from which you wish to be picked up) so that a driver knows where to pick you up ...."). If the pickup location is not at the current location, selecting the icon on the Client App can center the pickup location onto the current location.

25. On information and belief, when a Client App user requests a ride, information including but not limited to the pickup location is transmitted to the Arro Services via the Internet. Also via the Internet, an available driver may receive notification of the Client App user's ride request on a Driver Device, which indicates the requested pickup location upon acceptance. For example:



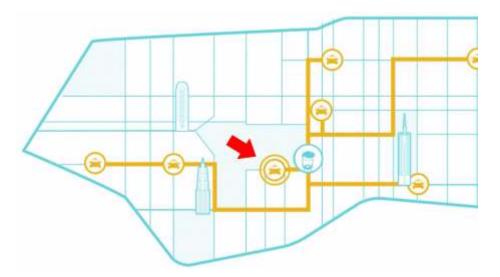
(screenshots from Arro MDT Training Video, available at <a href="http://www.goarro.com/drivers">http://www.goarro.com/drivers</a>.) See also, e.g., Arro Driver Guide at 2 ("If you're the first to accept, you'll see the passenger's ...

Name [and] Pickup Location."), available at <a href="http://www.goarro.com/fleets/new-york/driver-guide.pdf">http://www.goarro.com/fleets/new-york/driver-guide.pdf</a>; Arro Driver Companion App Guide at 2 ("You will see the name and address of the

passenger you are picking up, as well as the location of the passenger on your map."), available at <a href="http://www.goarro.com/fleets/new-york/companion-app-guide.pdf">http://www.goarro.com/fleets/new-york/companion-app-guide.pdf</a>;

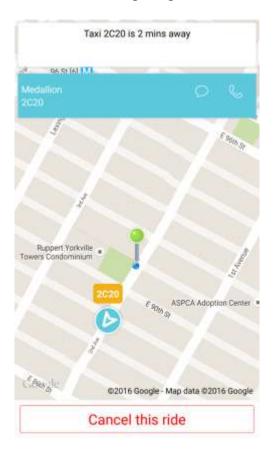
https://www.goarro.com/privacy ("The Company provides some of your Personal Information (such as your first name and your photo, if you have chosen to upload your photo to your profile) to the driver/partner who accepts your request for transportation so that the driver may contact and find you and (to the extent such a feature is available) to other users with whom you have consented to split the fare with for a particular trip. If there is a Third Party for which drivers work (that are providing the transportation service), such as for example a taxi fleet, this Third Party is or may also able to access your Personal Information, including your geolocation data.").

26. On information and belief, the Arro Services determines a driver's availability in part by comparing the current location of the Driver Device with the requested pickup location. For example:



(screenshot from Arro App video (showing "the closest taxi will pick you up wherever you are") (red arrow emphasis added), *available at* <a href="https://vimeo.com/155557669">https://vimeo.com/155557669</a>.) *See also*, *e.g.*, Arro Driver Guide at 2 ("E-hails will only be sent to you if you are close and available."), *available at* <a href="http://www.goarro.com/fleets/new-york/driver-guide.pdf">http://www.goarro.com/fleets/new-york/driver-guide.pdf</a>.

- 27. On information and belief, when a driver accepts a ride request, the Driver App transmits information indicating such acceptance to the Arro Services via the Internet, which then notifies the Client Device via the Internet accordingly. *See*, *e.g.*, Arro Driver Guide at 2 ("The passenger will be told you're on your way to pick them up."), *available at* <a href="http://www.goarro.com/fleets/new-york/driver-guide.pdf">http://www.goarro.com/fleets/new-york/driver-guide.pdf</a>.
- 28. The Client Device displays information about the assigned driver and shows the location of the Driver Device as it travels to the pickup location. For example:

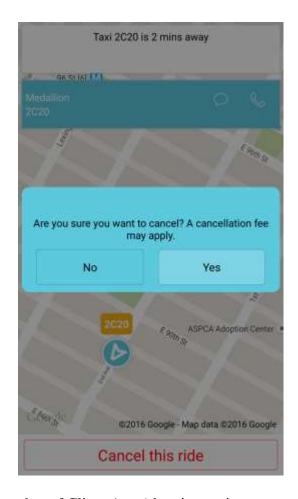


(Samsung Galaxy S6 screenshot of Client App (after being assigned a driver).)

29. On information and belief, in addition to communicating a ride request and a driver's acceptance, the Arro Services enable the Client Device and Driver Device to communicate other information with each other via the Internet, including but not limited to ride cancellations. For example:

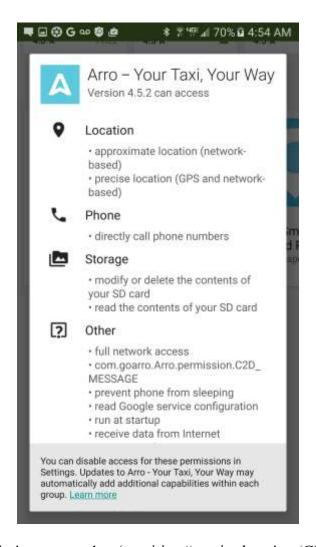
Notifications	
Notifications	<u>On</u>
Receipt (Email)	<u>On</u>
Driver Assigned	On On
Confirm Pairing	<u>On</u>
Vehicle at Pickup	<u>On</u>
Payment Confirmation	On _
Driver bailed	On

(Samsung Galaxy S6 screenshot of Client App (viewing notification settings).)



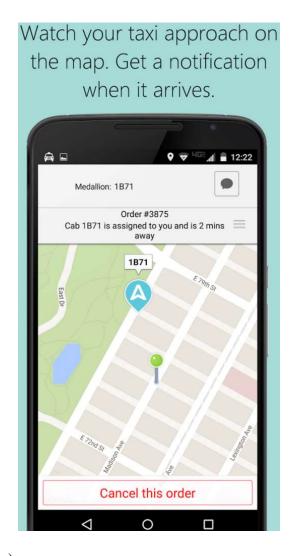
(Samsung Galaxy S6 screenshot of Client App (showing option to cancel ride).) *See also, e.g.*, Arro Driver Guide at 1 ("What happens if the passenger does not show up? Wait at least 5 minutes and then press the 'no show' button."), available at <a href="http://www.goarro.com/fleets/new-york/driver-guide.pdf">http://www.goarro.com/fleets/new-york/driver-guide.pdf</a>.

30. On information and belief, the Client App transmits Client Device location information determined at least in part from the Client Device GPS to the Arro Services over the Internet. For example:



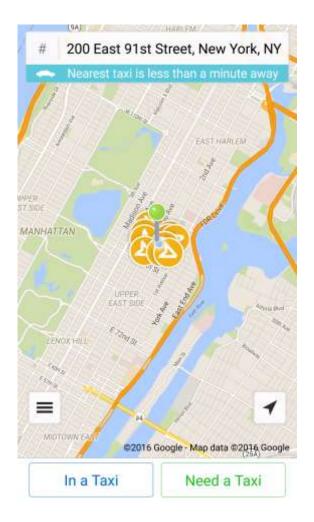
(Arro for Android permissions screenshot (requiring "precise location (GPS and network-based)," "full network access," and "receive data from Internet").) *See also, e.g.*, <a href="https://www.goarro.com/privacy">https://www.goarro.com/privacy</a> ("[T]racking information is collected as you navigate through our Services, including, but not limited to geographic areas and locations. If you are traveling in a vehicle requested via our Services, the driver's mobile phone will send your GPS coordinates, during the ride, to our servers.").

31. On information and belief, the Driver App transmits Driver Device location information determined at least in part from the Driver Device GPS to the Arro Services over the Internet. For example:



(from Arro app store page.)

- 32. Therefore, the Arro Services integrated with existing Client Devices and Driver Devices configured to determine their respective locations at least in part from GPS data (the "Accused System") falls within the scope of at least claim 1 of the '448 patent.
- 33. The Accused System also falls within the scope of claim 4 of the '448 patent because, for example, it is configured to restrict the universe of integrated Driver Devices that a Client Device can communicate with based upon a location parameter. For example:



(Samsung Galaxy S6 screenshot of Client App (only showing available Arro drivers within a given distance from the pickup location).) *See also, e.g.*, Arro Driver Guide at 1 ("*Will I have to drive far when I accept an e-hail?* No! Arro will only send you trips if you are nearby. Usually you will only be a short distance away."), *available at* <a href="http://www.goarro.com/fleets/new-york/driver-guide.pdf">http://www.goarro.com/fleets/new-york/driver-guide.pdf</a>.

34. The Accused System also falls within the scope of claim 6 of the '448 patent because it is configured to automatically identify the Driver Device to the Client Device and vice versa. When a driver accepts a ride request, identifying information about the Driver Device and its user is transmitted to the Client Device. *See, e.g., supra* ¶ 28. And, identifying information about the Client Device and its user is transmitted to the Driver Device. *See, e.g., supra* ¶ 25.

### Direct Infringement of System Claims 1, 4, and 6 of U.S. Patent No. 7,797,448

35. Defendants, pursuant to 35 U.S.C. § 271(a), have directly infringed and continue to directly infringe, literally and/or under the doctrine of equivalents, jointly and/or severally, one or more claims of the '448 patent, including at least claims 1, 4, and 6, by using and making, in this judicial district and/or elsewhere in the United States, the Accused System. For example, Defendants control the Accused System as a whole by running, operating, and/or supporting the Arro Services or otherwise making the Arro Services available to Client Devices and Driver Devices, and obtain benefits from such use at least by collecting transportation payments booked through the Client App. Defendants make the Accused System by hosting and/or launching the Arro Services or otherwise making the Arro Services available to existing Client Devices and Driver Devices configured to determine their respective locations at least in part from GPS data such that they are capable of communicating with each other over the Internet.

## Inducement of System Claims 1, 4, and 6 of U.S. Patent No. 7,797,448

36. At least on or after the filing of this Complaint, Defendants, pursuant to 35 U.S.C. § 271(b), knowingly and intentionally actively induce the infringement of one or more claims of the '448 patent, jointly and/or severally, including at least claims 1, 4, and 6, by instructing and otherwise encouraging infringement and by making the Client App and Driver App available to Arro customers, drivers, and/or driver employers to download and install onto their respective Client Devices and Driver Devices in order to use the Accused System. For example, the Client App requires device permissions that include access to "precise location (GPS and network-based)," "full network access," and "receive data from Internet." *See supra* ¶ 30. Defendants also provide many instructional videos and other promotional materials demonstrating how the Client Device and Driver Device can communicate with each other to facilitate transportation

services in a way that infringes the '448 patent. *See generally, e.g.*, Arro App video, *available at*<a href="https://vimeo.com/155557669">https://vimeo.com/155557669</a>; Arro Driver Guide, *available at*<a href="http://www.goarro.com/fleets/new-york/driver-guide.pdf">http://www.goarro.com/fleets/new-york/driver-guide.pdf</a>; Arro Driver Companion App Guide, *available at* <a href="http://www.goarro.com/fleets/new-york/companion-app-guide.pdf">http://www.goarro.com/fleets/new-york/companion-app-guide.pdf</a>.

- 37. Arro customers, pursuant to 35 U.S.C. § 271(a), directly infringe, literally and/or under the doctrine of equivalents, one or more claims of the '448 patent, including at least claims 1, 4, and 6, by using the Accused System. For example, Arro customers control the Accused System as a whole by using Client Devices in order to transmit transportation requests to Driver Devices and otherwise communicate with those Driver Devices over the Internet to facilitate successful transactions, and obtain benefits from such use at least by virtue of the Arro rides.
- 38. Arro drivers, pursuant to 35 U.S.C. § 271(a), directly infringe, literally and/or under the doctrine of equivalents, one or more claims of the '448 patent, including at least claims 1, 4, and 6, by using the Accused System. For example, Arro drivers control the Accused System as a whole by using Driver Devices in order to accept transportation requests from Client Devices and otherwise communicate with those Client Devices over the Internet to facilitate successful transactions, and obtain benefits from such use at least by virtue of customer payments for the Arro rides.

# Direct Infringement of Method Claim 8 of U.S. Patent No. 7,797,448

39. Defendants, pursuant to 35 U.S.C. § 271(a), have directly infringed and continue to directly infringe, literally and/or under the doctrine of equivalents, jointly and/or severally, claim 8 of the '448 patent by using, in this judicial district and/or elsewhere in the United States, the Accused System to identify the locations of Client Devices and Driver Devices. *See*, *e.g.*, <a href="http://www.goarro.com/privacy">http://www.goarro.com/privacy</a> ("We track geolocation data through your Mobile Device for

various purposes. These purposes include for you to be able to view the drivers in your area that are close to your location, for you to set your pick up location (which is the location from which you wish to be picked up) so that a driver knows where to pick you up ....").

# Inducement of Method Claim 8 of U.S. Patent No. 7,797,448

- 40. At least on or after the filing of this Complaint, Defendants, pursuant to 35 U.S.C. § 271(b), knowingly and intentionally actively induce the infringement of claim 8 of the '448 patent, jointly and/or severally, by instructing and otherwise encouraging infringement and by promoting, advertising, and instructing Client Device users about the Accused System's ability to enable Client Devices to track its own location and the location of Driver Devices to facilitate on demand transportation. *See generally, e.g.*, Arro App video, *available at* https://vimeo.com/155557669.
- 41. Arro customers, pursuant to 35 U.S.C. § 271(a), directly infringe, literally and/or under the doctrine of equivalents, claim 8 of the '448 patent by using the Client Device component of the Accused System to track its own location and the locations of Driver Devices to facilitate on demand transportation. For example, the locations of Driver Devices are tracked by a Client Device at least upon launching the Client App and/or booking a ride with a particular Arro driver.
- 42. On information and belief, the owner(s) of the '448 patent have complied with 35 U.S.C. § 287(a) at all relevant times.
- 43. Blackbird Technologies has sustained damages as a direct and proximate result of Defendants' infringement of the '448 patent.

- 44. As a consequence of Defendants' infringement of the '448 patent, Blackbird Technologies is entitled to the recovery of past damages in the form of, at a minimum, a reasonable royalty.
- 45. On information and belief, Defendants will continue to infringe the '448 patent unless enjoined by this Court.
- 46. As a consequence of continued infringement of the '448 patent by Defendants, Blackbird Technologies has been irreparably damaged to an extent not yet determined and will continue to be irreparably damaged by such acts unless Defendants are enjoined by this Court from committing further acts of infringement. Blackbird Technologies has no adequate remedy at law. In the event this Court determines that it will not award injunctive relief, this Court should require Defendants to pay damages for past infringement of the '448 patent and royalties for its infringement of the '448 patent on a going-forward basis.

#### PRAYER FOR RELIEF

WHEREFORE, Blackbird Technologies respectfully requests that this Court enter judgment against Defendants as follows:

- A. Adjudging that Defendants, jointly and/or severally, have infringed one or more claims of the '448 patent, including at least claims 1, 4, 6, and 8 literally and/or under the doctrine of equivalents, in violation of 35 U.S.C. §§ 271(a) and (b);
- B. An award of damages to be paid by Defendants adequate to compensate Blackbird Technologies for Defendants' past infringement and any continuing or future infringement up until the date such judgment is entered, and in no event less than a reasonable royalty, including interest, costs, and disbursements pursuant to 35 U.S.C. § 284;

- C. Granting Blackbird Technologies permanent injunctive relief pursuant to 35 U.S.C. § 283 enjoining Defendants, their officers, agents, servants, employees, affiliates, and all others in active concert therewith from future acts of infringing the '448 patent;
- D. In the event that this Court determines that it will not enter injunctive relief, ordering Defendants to continue to pay royalties to Blackbird Technologies for infringement of the '448 patent on a going-forward basis;
- E. Adjudging that this case be exceptional under 35 U.S.C. § 285 and awarding enhanced damages, including costs and attorneys' fees, to Blackbird Technologies;
- F. Awarding Blackbird Technologies pre-judgment and post-judgment interest at the maximum rate permitted by law on its damages; and
- G. Granting Blackbird Technologies such further relief as this Court deems just and proper under the circumstances.

#### **DEMAND FOR JURY TRIAL**

Blackbird Technologies demands a trial by jury on all claims and issues so triable.

Dated: July 8, 2016

OF COUNSEL

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/s/ Stamatios Stamoulis

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